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Advances in Refractory Materials: Design, Microstructure, Properties and Applications

Guest Editor:

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Deadline for manuscript submissions:

closed (20 June 2023)

Message from the Guest Editor

Dear Colleagues,

Refractories (or refractory materials) are inorganic, non-metallic, porous, and heterogeneous materials, which are composed of thermally stable mineral aggregates, a binder phase, and additives. Cement, lime, steel, non-ferrous metals, glass, ceramics, and other materials essential to our daily lives are made through a high-temperature heat treatment process. The use of refractories is essential for these processes.

This Special Issue will accept papers concerning, e.g., enhanced corrosion resistance of refractories, physical properties and corrosion resistance of refractories, cement-containing and cement-free castables, spinel-containing and spinel-forming castables, raw materials for refractories, environment-friendly and chromium (Cr)-free refractories, carbon (C)-containing refractories, recycling of refractories, deep learning and machine learning in refractories technology, prediction of refractory wear with machine learning methods, calcium aluminate cement hydration, novel binders alternative to calcium aluminate cements, cements for high performance concretes, methods of refractories investigation, and other important topics.



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Message from the Editor-in-Chief

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